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California WIC Participants' and Local Agency Directors' Experiences during the Coronavirus Disease 2019 Pandemic: A Qualitative Examination

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ABSTRACT

Background The US Department of Agriculture granted waivers to allow flexibility in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) operations during the coronavirus disease 2019 (COVID-19) pandemic; however, research examining the associations between waiver introduction and changes in perceptions, practices, and challenges of WIC participants' and agency directors' experiences is limited.

Objective The objective of this study was to assess California WIC participants' and agency directors' perceptions and practices of remote WIC services during the COVID-19 pandemic. A secondary aim was to understand other COVID-19 challenges related to maintaining access to healthy foods by WIC participants.

Design A qualitative study that included semistructured interviews was conducted between June 2020 and March 2021.

Participants and setting One hundred eighty-two WIC participants with a child aged 0 to 5 years from three regions of California (Southern, Central, and Northern) and 22 local WIC agency directors across the state were interviewed.

Main outcome measures WIC participants' and agency directors' perceptions, practices, and other challenges during COVID-19.

Statistical analyses performed Interviews were recorded, transcribed, and analyzed using a grounded theory approach.

Results Participants shared that they valued the information received from WIC and were very satisfied with remote WIC services. Participants reported that enrolling in WIC remotely was easier than coming in person. All waivers and changes to WIC operations, namely the physical presence, remote benefit issuance, and separation of duties waivers, and remote work and remote delivery of nutrition education, were largely viewed by WIC agency directors as options that should be continued post-pandemic. Further, a majority (63%) of households reported experiencing food insecurity, and half of respondents received food from a food bank or pantry during the pandemic.

Conclusions Findings suggest WIC will attract and retain the most families by offering a hybrid model of services, incorporating both onsite services and remote options to work more efficiently and effectively.

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THE GLOBAL CORONAVIRUS DISEASE 2019 (COVID-19) pandemic has economically impacted many communities in the United States, further negatively influencing health outcomes.^{1,2} Food insecurity rates among US families with children also increased from 13.6% in 2019 to 14.8% in 2020, emphasizing the need for food and nutrition assistance programs for low-income families.³ The burden of food insecurity has disproportionately influenced certain populations. For example, food

insecurity increased more in low-income minority households of Hispanic individuals (48%) and Black individuals (50%) in comparison to those of White individuals (32%).⁴

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is the third largest US Department of Agriculture (USDA) nutrition assistance program serving approximately 6.2 million participants during fiscal year 2020.⁵ According to federal guidelines, WIC supports low-income, nutritionally at-risk pregnant and postpartum

women, infants, and children up to age 5 years.⁶ Before the COVID-19 pandemic, participants in WIC typically visited a local WIC clinic at least quarterly to receive nutrition education and/or breastfeeding support, referrals to other health and social services, and monthly benefits for healthy foods.⁶ Benefits redeemable for supplemental healthy foods with approved vendors are provided to participants on electronic benefits transfer cards (WIC Card) monthly, and a companion telephone app helps participants understand and redeem their benefits. To enroll in WIC, women, infants, and children were required to be physically present at a WIC site to certify eligibility (eg, present identification, proof of address, and income information) and determine nutrition risk (eg, provide blood work, weight and height/length values, and complete a dietary assessment). Annually, eligible participants would be re-evaluated in person to continue on the program.

In response to the COVID-19 pandemic, the US Families First Coronavirus Response Act gave the USDA authority to grant federal waivers to allow states to implement alternatives to in-person service delivery, which included remote services.^{7,8} Starting in March 2020, these changes allowed states to waive participant physical presence for certification and recertification. In addition, the separation of duties requirement that at least two WIC employees must work on a single certification appointment was also waived. States were allowed to extend certification periods for children, issue food benefits remotely, and allow substitute food options.⁷ Food package substitutions allowed WIC participants to obtain alternatives to WIC-approved foods. Local WIC offices were able to utilize these operational changes to enable staff to work remotely, remotely issue benefits, and provide virtual education on use of the WIC Card and app, nutrition, and breastfeeding support. States took various approaches to adopting these federal waivers,⁹ with limited research evaluating the influence of waiver flexibilities on WIC participants and agency directors during COVID-19.⁸⁻¹¹ For example, an evaluation of WIC's transition to remote services in Washington State revealed that both participants and staff were satisfied with remote services and would prefer a hybrid service postpandemic.¹¹ In Tennessee, WIC participants reported difficulties with increased food prices and with redeeming benefits due to the lack of WIC foods in grocery stores.¹⁰

In March 2020, California's governor issued an order requiring individuals to remain at home as much as possible.¹² As a result, local WIC clinics in California adopted all of the federal waivers and shifted to primarily remote service delivery. Whereas current literature has highlighted the influence of COVID-19 on WIC participants, there remains a dearth of research on WIC households in diverse populations. One study in Los Angeles County found that WIC participants were also satisfied with remote pandemic services⁸; however, agency director perspectives were not evaluated, which is necessary for assessing feasibility of long-term adaption to remote changes.

Thus, understanding California WIC participant experiences is integral to reaching an understanding of the national WIC participant population experience during COVID-19 because California serves more WIC participants than any other state,⁵ has among the highest rates of poverty, and includes among the most racially and ethnically diverse

RESEARCH SNAPSHOT

Research Question: What were perceptions, practices, and challenges of California Special Supplemental Nutrition Program for Women, Infants, and Children participants and agency directors during the coronavirus disease 2019 pandemic?

Key Findings: Findings suggest the California Special Supplemental Nutrition Program for Women, Infants, and Children will attract and retain the most families by using a more flexible hybrid model, incorporating both onsite services and remote options to work more efficiently and effectively.

populations.¹³ Therefore, the objective of this study was to assess California WIC participants' and agency directors' perceptions and practices of WIC services during the COVID-19 pandemic. A secondary aim was to understand other COVID-19 challenges related to maintaining access to healthy foods by WIC participants.

METHODS

The study was reviewed and approved by the California Health and Human Services Agency and the University of California, Davis Institutional Review Boards. WIC participants and agency directors provided verbal consent to participate in the study.

WIC Participant Interviews

It was decided *a priori* to interview WIC participants with children, whose program eligibility is defined by federal guidelines,⁶ from three regions in California: Southern California, Central Valley, and Northern California (~60 from each with half English-speaking and half Spanish-speaking). These regions were selected because of variation in urban and rural locations, as well as small and large WIC agencies, which could have contributed to differences in operational challenges during the pandemic. In May 2020, 200 caregivers with a child aged 0 to 5 years participating in WIC were randomly selected from administrative records of families served in Los Angeles County. Inclusion criteria included that participants: were aged 18 years or older, were not a foster child, spoke English or Spanish, had a telephone number in WIC records, and had a child participating in WIC. Caregivers were stratified by primary language ($n = 100$ English and $n = 100$ Spanish) and whether or not they had been on WIC before the pandemic or had joined WIC since March 2020. Of 200 participants, the first 110 were invited by text message to participate in an interview until 60 interviews were completed in June and July 2020. A similar protocol was followed with WIC participants from the Central Valley and Northern California. Of 200 WIC participants randomly selected from administrative records in the Central Valley, 148 were invited by text to participate until 60 interviews were completed in September and November 2020. Of 200 WIC participants randomly selected from Northern California, 120 were invited by text to participate until 62 interviews were completed in March 2021 (two additional WIC participants were interviewed because they had been scheduled

before the 60 mark was reached). This led to a total of 182 WIC participants.

Interview questions were developed to assess WIC participants' experience and satisfaction with remote interactions, enrollment, or recertification in WIC, and other potential challenges during COVID-19, such as shopping for WIC foods, including the expanded food options.¹⁴ Food insecurity was assessed using the 2-item screener derived from the USDA 18-item Household Food Security Survey.¹⁵ Demographic information, including race and ethnicity and education level were self-reported by participants. The semistructured interview included a combination of multiple-choice, yes/no, and open-ended questions (see Figure 1, available at www.jandonline.org). The instrument was programed into Qualtrics¹⁶ and pilot-tested by research staff. All interviews were conducted by telephone in Spanish (by one researcher) or English (by three researchers), recorded, transcribed and, if conducted in Spanish, translated into English. Interviewers captured responses to close-ended questions using Qualtrics. Each interview took 20 to 45 minutes to complete. Each respondent received a \$25 gift card after completing the interview.

WIC Local Agency Director Interviews

In October 2020, invitations were emailed to all California WIC agency directors (n = 83) with the goal of interviewing approximately 20 WIC agency directors. Of the 29 directors who volunteered, 22 completed interviews in November and December 2020. Interview questions were developed to assess challenges operating WIC during the COVID-19 pandemic, what was done to overcome those challenges, and which waivers and other adaptations agency directors would like to see continued post-pandemic.¹⁷ Specific topics included how the agencies adapted to the changes associated with the USDA waivers (eg, physical presence, extended certification, remote benefit issuance, food package substitutions, and separation of duties) and other changes that resulted from the pandemic (eg, remote work, auto-issuance of benefits by state, remote education, and breastfeeding support). Race and ethnicity, sex or gender, and age information for WIC agency directors were not collected. The structured interview included a combination of multiple-choice and open-ended questions (see Figure 2 available at www.jandonline.org). The instrument was programed into Qualtrics, checked for appropriate skip patterns, pilot-tested with one WIC agency director, and then language was modified for clarity as needed. One researcher conducted all local agency director interviews by videoconference in English. Each interview took 1 to 1.5 hours to complete and was recorded. Responses to open-ended questions were transcribed.

Data Analysis

WIC participant responses to close-ended questions were summarized with descriptive statistics (SAS version 9.4).¹⁸ Responses to open-ended questions from WIC participants and agency directors were transcribed to capture quotes and coded using Dedoose (version 9.0.17).¹⁹ The research team determined that the themes arising in WIC participant responses were repeated in the agency director interviews, and deemed saturation was met. Interviews were transcribed by either the interviewer or one of three other researchers.

Consistent with grounded theory,²⁰ the data were used to develop codes rather than the codes being identified *a priori*. The steps of analysis were based on Braun and colleagues²¹ as follows: became familiar with the data by reviewing collectively, generated initial codes and applied them to recorded interview transcripts for each topic area, examined all quotes associated with each code and organized codes into themes, refined themes by having both the initial and second coder independently examine all initial codes and quotes associated with a theme and revise as needed to reach consensus, and selected quotes to exemplify each theme. One researcher, who did not conduct interviews, reviewed the written transcripts to identify preliminary themes within each topic area and then identified quotes to illustrate each theme. All transcripts were coded sequentially by type (WIC participant or WIC agency director). Each statement, which could include multiple sentences, was coded individually. The researchers deemed that saturation had been reached and that no further interviews were needed when no new themes emerged when coding the final interviews within each group.

During May 2021, 30 agency directors invited from the study were sent the draft report and invited to attend a 2-hour virtual meeting and provide written feedback. Themes from the WIC agency director input on the USDA waivers and other changes were then summarized and feedback on the research findings was obtained from 20 WIC stakeholders, including four agency directors, two WIC participants, and 14 WIC researchers and advocates. Stakeholders were asked to reflect upon the findings and revise, clarify, and/or confirm the researchers' interpretation.

RESULTS

WIC Participant Demographic Characteristics

Of the 182 total respondents, half completed the interview in English and half in Spanish (Table 1). Most respondents were on WIC before the pandemic (n = 126; 69%); 56 had enrolled in WIC in March 2020 or later. The majority (85%) were Hispanic, had a high school education (41%) or higher (32%), and had a median of 2.0 children (median on WIC = 1.0). One-quarter (26%) currently participated in the Supplemental Nutrition Assistance Program and three-quarters (75%) participated in Medicaid. Relatively few received Temporary Assistance for Needy Families (4%) and 11% applied for Pandemic-Electronic Benefit Transfer (P-EBT) and 44% received P-EBT due to automatic enrollment.

Satisfaction with Remote Enrollment and Appointments

Among the new enrollees, about half joined WIC for the first time during the pandemic; the other half returned to WIC after a gap in participation:

(We enrolled in WIC) because we needed the help. It was getting very expensive to buy milk and just everything because the kids were not in school anymore. So having them at home 24/7 was increasing my expense for goods like milk and everything they would get at school. —English-speaking participant (P030)

When asked how hard or easy it was to apply to WIC, respondents brought up how easy and quick the enrollment process was. Most participants reported being comfortable

Table 1. Characteristics of California Special Supplemental Nutrition Program for Women, Infants and Children (WIC) participants by language

Characteristic	Total (N = 182)	English speaking (n = 91)	Spanish speaking (n = 91)
	←————— <i>n (%)</i> —————→		
Race/ethnicity^a			
Asian	7 (3.9)	7 (7.7)	0 (0.0)
Black	3 (1.7)	3 (3.3)	0 (0.0)
Hispanic/Latino	153 (85.5)	65 (71.4)	88 (100.0)
White	13 (7.3)	13 (14.3)	0 (0.0)
Other ^b	3 (1.7)	3 (3.3)	0 (0.0)
Education			
Eighth grade or less	23 (12.6)	2 (2.2)	21 (23.1)
Some high school	26 (14.3)	8 (8.8)	32 (35.2)
High school graduate/GED	74 (40.7)	32 (35.2)	42 (46.2)
Some college/trade school/associate degree	41 (22.5)	37 (40.7)	4 (4.4)
Four-year college graduate	15 (8.2)	10 (11.0)	5 (5.5)
Postgraduate/professional degree	3 (1.7)	7 (2.2)	1 (1.1)
	←————— <i>mean (SD)</i> —————→		
No. in household			
Children	2.3 (1.1)	2.2 (1.1)	2.4 (1.1)
Adults	2.6 (1.4)	2.4 (1.3)	2.8 (1.5)
Children in household on WIC	1.3 (0.5)	1.3 (0.6)	1.2 (0.5)
Woman in household on WIC ^c (n = 73)	1.0 (0.1)	1.0 (0.2)	1.0 (0.0)
	←————— <i>n (%)</i> —————→		
Supplemental Nutrition Assistance Program participation^d			
Before COVID-19 ^e pandemic	47 (25.8)	28 (90.3)	19 (86.4)
Newly applied since COVID-19 pandemic	31 (17.0)	14 (66.7)	17 (56.7)
Temporary Assistance for Needy Families participation^d			
Before COVID-19 pandemic	8 (4.4)	8 (72.7)	0 (0.0)
Newly applied since COVID-19 pandemic	9 (5.0)	4 (16.7)	5 (15.2)
Medicaid participation^d			
Before COVID-19 pandemic	136 (74.7)	64 (95.5)	72 (98.6)
Newly applied since COVID-19 pandemic	15 (8.2)	6 (66.7)	9 (69.2)
Other programs applied for since start of COVID-19 pandemic^d			
Pandemic-EBT ^f	20 (11.0)	8 (32.0)	12 (36.4)
Free or reduced price school meals ^g	12 (6.6)	4 (16.0)	8 (24.2)

^aThe following race and ethnicity options were offered: American Indian or Alaskan native, Asian, Black or African American, Hispanic or Latino, Pacific Islander, White, or Other, with the option for the respondent to self-specify. Respondents could select all that applied.

^b'Other' includes Pacific Islander, American Indian/Alaska Native, or other ethnicities not specified.

^cReflects Central and Northern California only; data not available for Southern California participants.

^dThe coronavirus disease 2019 pandemic was declared a national emergency in the United States on March 13, 2020. At the time of writing, the national emergency declaration has not expired.

^eCOVID-19 = coronavirus disease 2020.

^fRefers to federal food program enacted in response to the COVID-19 pandemic, providing temporary emergency nutrition benefits to select groups of families with children. More information is available at <https://www.cdss.ca.gov/home/pandemic-ebt>.

^gRefers to federally assisted meal programs providing nutritionally balanced, low-cost or free breakfast and/or lunch to children each school day. More information is available at <https://www.fns.usda.gov/programs>.

(88%) providing proof of income, a requirement for WIC enrollment, remotely:

“This time it was the easiest. It was excellent. It was easier [compared with enrolling in other programs].”—Spanish-speaking participant (P173)

Respondents also talked about how helpful WIC staff members were during enrollment. Several respondents brought up the convenience of remote enrollment compared to in person because of transportation, scheduling, or child care constraints:

I actually found it (WIC appointments) much...easier (than in the past) because I didn't have to go into the office...especially if you can't find a babysitter. So I found it more convenient for me, because I have such a busy schedule because of school. It works perfectly for me. —English-speaking participant (P017)

For all participants in the study, the most helpful ways that participants received information during the pandemic were by telephone call (selected by 87% of respondents), and text (75%). Several indicated that they preferred remote over in-person interactions. However, some participants acknowledged challenges with only interacting remotely, including missing weight checks or blood work used for assessing nutritional risk and other interactions with WIC staff.

WIC Local Agency Director and Site Characteristics

The agency directors interviewed had worked at WIC for an average of 18 years. Agency sizes ranged from small (serving under 500 WIC participants per month) to very large (more than 60,000 per month) mirroring the distribution of agency caseloads statewide. Many WIC agencies ($n = 13$) responded by offering only virtual services. Of the nine agencies that continued some in-person visits, most were for an occasional walk-in visit (a participant presenting unscheduled with a question or problem), breast pump pick up (WIC provides electronic pumps to breastfeeding women), or breastfeeding support for new mothers. In terms of staffing, more than half of the agencies ($n = 12$) used a hybrid model where some WIC staff worked onsite, whereas other worked remotely, which allowed staff more flexibility in caring for their children while schools and child care were closed. Six agencies continued to have all staff work onsite, whereas four agencies transitioned to having all staff work at home.

WIC Certification and Recertification during COVID-19

A summary of the themes from the WIC agency director input on the USDA waivers and other changes is summarized in [Table 2](#). During the pandemic, WIC participants in California were primarily certified or recertified over the telephone. Agencies mainly used e-mail with participants to send or sign documents; other electronic methods included text and fax. About half of the agencies also had participants come in-person to WIC clinics for certification appointments and half allowed participants to drop off documents curbside. Remote certification was viewed as the WIC service during COVID-19 hardest to implement compared with other changes, with only one director saying that nothing was hard about remote certification. Despite the initial challenges of remote certification, all but one agency director wanted to

continue to have the option to certify participants remotely, even after it would be safe to reopen WIC clinics fully:

It's more convenient for the participants. They seem happier when they can do it (certify/recertify) at home. They don't have to grab the kids, travel down to the office, sit in the waiting room. It can be very hectic for them. And we don't really have their attention when we're trying to counsel them. But when it's at home, they're more relaxed and they're just happier. —AD15

The no show rate is definitely lower, doing it remotely. When we had appointments in the clinic every day, the no show rate was so high for certification appointments, mid certification appointments, and now when we're doing services remotely we're able to get a hold of probably 90% of our appointments. —AD16

With remote certification, agency directors suggested that technology that augments the ability to conduct appointments by videoconference could make the process even easier. Extending the certification period for children was considered relatively easy by the 10 agency directors who implemented it, and six of the 10 directors stated that they would not do anything differently if they could implement extended certification periods in the future. Six of the 10 agencies that implemented the extended certification waiver said that they would like to continue to have it as an option, particularly for children who were not at high risk.

Remote Benefit Issuance and Food Package Substitutions

Remote benefit issuance was viewed as easier to implement during COVID-19 compared with other federal waivers. More than one-third of directors said that nothing was hard about remotely issuing food benefits and more than half said that they would not do anything differently from what they had done during the pandemic. Despite initial difficulties getting WIC cards to participants due to issues with mail, all 22 agency directors wanted to continue to have the option of issuing food benefits remotely. Directors cited the convenience of the process for both WIC participants and WIC staff.

With regard to remote benefit issuance, the most common challenges reported by agency directors involved having to rapidly learn a new process, as well as dealing with food benefit errors that went unnoticed when not having access to information that had previously been printed on the physical checks for WIC foods. Fourteen agencies also reported implementation challenges with the food package substitutions, most notably the challenges faced by participants and vendors in understanding the allowable substitutions and allowing the purchases to go through at the point of sale.

Overall, WIC agency directors reported that clinics were successfully able to pivot to remote operations due to the USDA waivers. The California Department of Public Health WIC Division was proactive in providing support and guidance to agencies, including weekly statewide calls for all local agency directors, as well as enacting the waivers rapidly, which allowed local agency directors to learn quickly how to deliver WIC services remotely. One agency director stated:

Table 2. California Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency director input on US Department of Agriculture waivers and other remote operation changes during coronavirus disease 2019 (COVID-19) (N = 22)

Change	Advantages	Considerations	Future needs if continued
Federal waivers			
Physical presence for enrollment/recertification	<ul style="list-style-type: none"> Participant convenience Better access to some participants Operational efficiency 	<ul style="list-style-type: none"> Difficult to get height/weight, bloodwork 	<ul style="list-style-type: none"> Videoconferencing option added to telephone and other remote and in-person methods Share data across social services
Extended certification for children	<ul style="list-style-type: none"> Flexibility in face of extenuating circumstances 	<ul style="list-style-type: none"> Participant confusion when family members on different schedules Additional staff tracking 	<ul style="list-style-type: none"> State guidance on when to use
Remote benefit issuance	<ul style="list-style-type: none"> Participant convenience and retention Frees staff time for other needs 	<ul style="list-style-type: none"> Postal delays in new WIC cards Benefit errors not noticed by participants Participants unaware of foods allowed and not yet purchased 	<ul style="list-style-type: none"> WIC app improvements for participant benefit tracking^a
Food package substitutions	<ul style="list-style-type: none"> Participant flexibility More cultural options 	<ul style="list-style-type: none"> Confusing to participants and vendors early on 	<ul style="list-style-type: none"> Clear communication to participants and vendors
Separation of duties	<ul style="list-style-type: none"> Customer service, less participant wait times Operational efficiency 	<ul style="list-style-type: none"> Possibly less quality assurance 	<ul style="list-style-type: none"> Use of new WIC Management Information System reports for fraud monitoring
Other remote operational changes			
Remote staff work	<ul style="list-style-type: none"> Staff flexibility, productivity, and job satisfaction Reduced space costs 	<ul style="list-style-type: none"> Supplies/equipment needed 	<ul style="list-style-type: none"> State guidance on how to operationalize remote staff work (eg, when, who, how) Technology upgrades
State auto-issuance of benefits	<ul style="list-style-type: none"> Ensures participants get benefits Frees staff time for other needs 	<ul style="list-style-type: none"> Package errors Less participant engagement Lower redemption by some participants 	<ul style="list-style-type: none"> WIC app notification when benefits are issued More staff training and communication to participants Families issued together
Remote education on use of WIC card/app	<ul style="list-style-type: none"> Participant convenience 	<ul style="list-style-type: none"> Easier to demonstrate in-person to participants who are not as tech savvy 	<ul style="list-style-type: none"> Videoconferencing option added to other methods Improved state telephone center that participants can contact with issues

(continued on next page)

Table 2. California Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), agency director input on US Department of Agriculture waivers and other remote operation changes during coronavirus disease 2019 (COVID-19) (N = 22) (continued)

Change	Advantages	Considerations	Future needs if continued
Remote nutrition education	<ul style="list-style-type: none"> • More engagement of some participants • Participant convenience • Better access to educational materials 	<ul style="list-style-type: none"> • Less engagement for some participants • More staff time with loss of group classes 	<ul style="list-style-type: none"> • Videoconferencing option added to other remote and in-person education
Remote breastfeeding support	<ul style="list-style-type: none"> • Participant convenience, particularly for mothers of newborns 	<ul style="list-style-type: none"> • Less suitable for some breastfeeding issues 	<ul style="list-style-type: none"> • Videoconferencing option added to other remote and in-person individual and group support

^aImplemented by the state after this study was conducted.

COVID has brought WIC into the modern era. WIC was this antiquated program that was so onerous about coming to the site and then they (participants) had to sit and wait.... So just the flexibility and the ease of participating in WIC that has happened because of remote services is such a gift, and we should never give it up. –AD04

COVID-19 Challenges Related to Maintaining Access to Healthy Foods

More than one-quarter (29%) of WIC participants reported having less income due to reduced wages or work hours or job loss. Fewer than half of those with lost income (43%) applied for paid sick leave, wage replacement, or unemployment benefits. Such income protections were less often available to Spanish-speaking (28%) than English-speaking (59%) respondents. A majority of respondents (63%) reported household food insecurity, and half of all respondents had received food from a food bank or pantry during the pandemic. Among those who had used the emergency food system, most (76%) said the first time doing so was during the pandemic. Pandemic-EBT was described as being extremely helpful during a time of great need:

[Pandemic-EBT] really helped us a lot because it was at the time that we had no money, no job, or unemployment. It still hadn't come. Because what they gave them [children] from school was too difficult for me because I don't have transportation to go daily to pick [it] up. –Spanish-speaking participant (P064)

With children learning from home instead of in person at school, families were often required to provide more meals. More than half of families (53%) had received school meals for their school-age children before the pandemic. Slightly more than one-third (39%) continued to receive school meals. Among those receiving school meals, the majority (93%) were very or somewhat satisfied with the school meal program.

I think it's very convenient that they just have it like a drive-through, you don't have to get out with the kids in the car and honestly I think everything about it is very convenient. –English-speaking participant (P002)

Although many participants experienced limited resources, many stocked up on staples early on in the pandemic (reported by 41% of respondents) due to concerns about shortages and to reduce shopping trips and potential COVID-19 exposure. The respondents who stocked up on food reported purchasing quantities sufficient for up to 2 weeks (41%) or longer (42%) at a time. Others reported that they would have liked to purchase more staples but were unable because of food shortages in stores:

Yes, (we stocked up on food) for fear that there is no longer anything at the market. It has already happened to us. What we looked for we haven't found. –Spanish-speaking participant (P179)

Compared with before the pandemic, most families purchased either the same amount (48%) or more (47%) shelf-stable foods during the pandemic. For most households, purchase of fresh fruits and vegetables during the pandemic

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did not change (57%) or increased (38%). About one-third (30%) reported challenges finding WIC foods, more often at grocery stores than at WIC-only stores, but primarily at the start of the pandemic. Among those who reported challenges finding WIC foods, the most common shortages were for cow's milk (64%), eggs (33%), and fresh fruit (33%).

The beginning was really difficult. A lot of the places didn't have all the [WIC] items and I had to just skip out on stuff for the month. —English-speaking participant (P133)

DISCUSSION

When the COVID-19 pandemic was declared a national emergency, WIC operations across the country quickly transitioned to provide remote services as permitted through USDA waivers, in essence allowing the program to test new and innovative approaches. This is the first study to evaluate both California WIC participants' and agency directors' perceptions regarding what worked well and what challenges remained during COVID-19 to inform enhancements to the WIC program service model. This study utilized a qualitative approach by interviewing 182 WIC participants and 22 local agency directors, analyzing responses and translating them into themes, then obtaining feedback from participants on the research findings. This approach to share research results with WIC stakeholders was to ensure findings were consistent with the experiences of agency directors and participants, a method that has been shown to be successful in the past for using research findings to inform policy.²² This also allowed for multiple perspectives to be engaged in the process and yielded recommendations that were both participant- and director-centered. In addition, the study design to evaluate WIC participants and agency directors' perceptions and practices to changes to WIC services during the COVID-19 pandemic in a time-sensitive manner was only possible because of the longstanding collaborative partnership between a university partner and a WIC local agency.

Based on findings from the agency interviews, all waivers and changes to WIC operations, particularly the physical presence, remote benefit issuance, and separation of duties waivers, and remote staff work and remote delivery of nutrition education, were largely viewed as options that should be continued postpandemic. Overall, agency directors felt that WIC will attract and retain the most families using a more flexible hybrid model. Findings from the participant interviews also indicated comfort with remote enrollment and education processes. These findings that remote services have been well received by WIC participants and would benefit participants to maintain a hybrid model in the future are consistent with two other states, Tennessee and Washington, and Los Angeles County, that evaluated WIC participant experiences throughout the COVID-19 pandemic.^{8,10,11} The Tennessee study evaluated 24 WIC participants' experiences during the early part of the pandemic and found that the carryover of WIC flexibilities, such as physical presence and food package substitution waiver, would improve WIC program participation.¹⁰ These findings are also consistent with a study of 52 Washington WIC staff and 40 WIC participants that found that both participants and staff were satisfied with remote services during the pandemic.¹¹ Finally, this study is consistent with a

study of 246 Los Angeles County WIC participants that found high levels of satisfaction with remote service delivery, 25% of participants preferring all WIC services remaining remote with 75% desiring some in-person contact with WIC after the pandemic.⁸ However in the study by Ventura and colleagues,⁸ only Los Angeles WIC participants were interviewed with a child between 1 and 2 years, whereas in the current study, WIC participants and agency directors from three different regions in California provided a more balanced perspective on experiences and challenges utilizing WIC services during the COVID-19 pandemic.

In addition to changes to WIC services during COVID-19, the pandemic presented WIC participants with challenges related to accessing healthy foods. For example, WIC participants reported high rates of food insecurity and many received food from a food bank or pantry during the pandemic, which was also seen in a cross-sectional study of US households that found WIC participants experienced higher rates of food insecurity and food pantry use than non-WIC households.²³ Challenges such as shopping for WIC-approved food items were further exacerbated as California WIC participants reported difficulty finding WIC staples at grocery stores early in the pandemic due to retail shortages. These experiences were consistent with WIC participants in Tennessee¹⁰ and Washington State.¹¹ Further, government lockdowns and grocery store policies established to reduce the spread of COVID-19 caused unintentional consequences on WIC participants. For example, in Tennessee, WIC participants had trouble shopping with children due to limited patrons allowed in stores,¹⁰ whereas in this study, most California WIC participants were concerned about increased COVID-19 exposure during grocery trips.

In terms of WIC agency directors' experiences during COVID-19, directors stressed the need for flexibility to reflect their diverse skills and serving different numbers of participants with varied needs. Moving forward, states and local agencies need to be attentive to how alternative methods work for various WIC participants and locations, which could influence WIC participation rates in the future. This includes updating WIC services to address diverse languages, technology access and capabilities, life stage and nutrition risk, and remote and rural locations. For example, in a recent study by Vasan and colleagues⁹ comparing how WIC participation differed before and during the pandemic in 40 states that offered in-person or remote benefit issuance, researchers found that remote benefit issuance was associated with increased WIC participation. In the current study, agency directors articulated that care is needed so as not to lose what makes WIC special because WIC provides not only food but also vital services and nutrition information to young families at a critical stage and is foundational to their continued health. Considerations and future needs were identified, such as offering videoconference for remote breastfeeding support and improved communication for WIC participants and vendors in regard to food substitutions, that can be used to ensure that the advantages of each waiver and other changes implemented during the pandemic can be equitable and sustained moving forward as permanent options in WIC. In addition, the findings suggest that many WIC participants may benefit from remote services because of additional barriers (eg, transportation, child care, and work) beyond risk of infection from COVID-19.

In summary, many lessons were learned during the COVID-19 pandemic by WIC agencies and WIC participants through the use of waivers, which were recommended by agency directors as permanent options for regular WIC operations long after the pandemic is no longer a concern. These changes could modernize WIC practices and improve the program moving forward, ensuring greater access and program retention so that low-income women, infants, and young children receive the proven health benefits of the WIC program. Agency directors were universally in favor of a hybrid model in which the waivers become permanently allowed, and utilization of remote services continues, in concert with a return to onsite services because they become safe to provide. They believed these options optimize participant service and equity and best meet the health and nutrition needs of modern-day WIC participants.

Overall, WIC agency directors felt strongly that permanent adoption of flexibilities will provide “more tools in the WIC toolkit,” thus allowing WIC to serve participants more effectively and efficiently. WIC participants, likewise, valued the additional flexibility and convenience of remote services. WIC has long individualized the content of nutrition education to meet the needs of each WIC participant. As such, WIC nutritionists and registered dietitian nutritionists should consider further individualizing WIC nutrition education by providing additional flexibility regarding mode of delivery—virtual or in-person.

Strengths and Limitations

This study adds to the limited literature on WIC participant and agency director experiences during COVID-19, and examined time-sensitive WIC operational changes that may influence the delivery of WIC services in the future. A limitation is that the study sample included a random sample of WIC participants from three regions of the California and all local agency directors in the state were invited to participate in interviews; however, bias may have resulted from differential response rates. Another limitation is that whereas race and ethnicity and education level were self-reported by WIC participants, this study did not collect race and ethnicity, sex or gender, and age information for WIC agency directors, which may contribute to an individual's attitude, perception, and perspective related to COVID-19. Further, participants who were willing to respond to a text invite to participate in the study and participate in a telephone interview may be more willing to participate in remote services than other participants who prefer in-person services. Interviews were conducted by researchers not affiliated with WIC to minimize social desirability bias; however, some interviewees may have been reluctant to share all of their opinions. Further, qualitative techniques such as reflexivity and confirmability were not used; however, a triangulation approach was used by counting similar responses to corroborate findings²⁴ and a subset of WIC participants and agency directors provided feedback on the findings to confirm correct interpretation. Finally, food insecurity rates may appear higher compared with other studies since this study captures any food insecurity over the past year and uses the 2-item screener vs the USDA 18-item Household Food Security Survey.

CONCLUSIONS

This study examined experiences of WIC families and agency directors during the COVID-19 pandemic in California. Moving forward, a hybrid model pairing remote with onsite services will permit WIC agency directors to work more efficiently and effectively, putting time and attention where most needed. Moreover, providing remote options removes barriers to WIC participation, creating more equitable access by increasing participant-centered, convenient services. Study results provide timely insights to inform lasting improvements to the WIC program that can benefit both agency directors and participants, potentially increase participation in WIC and retention of eligible families, as well as inform preparedness for future crises.

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AUTHOR CONTRIBUTIONS

The authors' responsibilities were as follows—L. D. Ritchie and S. E. Whaley designed the research; C. A. Hecht, L. D. Ritchie, and N. Vital conducted research; M. M. Tsai, N. Vital, C. A. Hecht, and L. D. Ritchie analyzed the data; L. E. Au and A. M. Chaney wrote the manuscript; and L. E. Au had primary responsibility for final content. All authors read, edited, and approved the final manuscript.

Q0	Do you agree to participate in this interview today?	No (Record if reason given why not; End call) Yes, (continue) Did not pick up (add how many times you have tried to contact,(ie second attempt)
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- As we go, **I will move through different topics** so I don't keep you for too long.
- There are **no right or wrong answers**. We're just interested in your **thoughts**.

First, I'm going to ask you a series of questions and response options for each question. I will ask you to choose one response or to select all that apply.

Q00	CONTROL Question: Mark yes if WIC is offering additional money for Fruits and Vegetables during Pandemic.	No yes
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COVID Impacts

Q1.	How concerned do you feel about COVID? [Stanford Q1 modified]. Would you say... (read responses):	Not at all concerned A little concerned Moderately concerned Very concerned DK/Ref
Q2.	Have you or anyone in your household been diagnosed with COVID? (Positive test, or told by medical provider they probably are positive) By household, we mean anyone living with you.	No1 (skip to Q3) Yes2 DK/Ref
	a. [show if yes to Q2] How were you/your household member/s tested for COVID?	No.....1, but told I have Yes.....2 tested, Please describe DK/Ref
	b. [show if yes to Q2] Are you/were your household member/s able to get medical help for COVID? (Describe)	No1 Please describe Yes2 Please describe DK/Ref
Q3.	Have you or anyone in your household been concerned about having COVID but have not been able to get tested?	No1(skip to Q4) Yes2 DK/Ref
	a. [show if yes to Q3] Please describe your experience trying to get tested.	Describe DK/Ref
Q4.	Due to the COVID pandemic, have you or	Reduced wages, work hours or lost job

Figure 1. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	other members of your household experienced difficulties with any of the following things? I am going to list off several items, please tell me yes or no for each item. (<i>read items in random order</i>) [Stanford Q44; Select all that apply]	<p>.....Yes/No/DK/Ref (show Q5)</p> <p>Childcare access Yes/No/DK/Ref</p> <p>Getting food..... Yes/No/DK/Ref</p> <p>Housing..... Yes/No/DK/Ref (show Q6)</p> <p>Transportation..... Yes/No/DK/Ref (show Q7)</p> <p>Getting hand sanitizer or cleaning supplies... Yes/No/DK/Ref</p> <p>Getting medications, accessing healthcare or paying for medical expenses.....Yes/No/DK/Ref (show Q8)</p> <p>Getting physical activityYes/No/DK/Ref (show Q9)</p> <p>Other: _____ Yes/No/DK/Ref</p>
Q5	[Show if reduced wages/hours or lost job] Have you applied for paid sick leave or wage replacement, or unemployment benefits?	No1 Yes.....2 DK/Ref
	a. [show if yes to Q5] How did you learn about this? (<i>probe with paid sick leave or wage replacement or unemployment benefits if needed</i>)	Describe DK/Ref
Q6	[Show if experienced difficulty with housing] Has COVID affected your family's ability pay rent or mortgage payments?	No.....1 Yes.....2 How have you dealt with this? DK/Ref
	a. [Show if yes to Q6] Did you need to stop making payments at any time?	No.....1 Yes.....2 Please describe _____ DK /Ref
	b. [Show if yes to Q6a] Housing protections have been put in place that prevent families from being evicted during the pandemic if they cannot make their rent or mortgage payments. Have these helped keep you and your family from being evicted?	No.....1 Please describe _____ Yes.....2 Please describe _____ DK/Ref
Q7	[Show if experienced difficulty accessing transportation] How has COVID affected your family's ability to access transportation when needed?	Describe _____ How have you dealt with this? DK/Ref
Q8	[Show if experienced difficulty paying for medical expenses /getting medications/ accessing healthcare] How has COVID affected your family's ability to get	Describe _____ How have you dealt with this? DK/Ref

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	medications?	
Q9	[Show if experienced difficulty getting physical activity] How has COVID affected your family's ability to get physical activity?	Describe _____ How have you dealt with this? DK/Ref
Q10	Schools and many childcare facilities have been closed due to COVID. Has this impacted your family?	No.....1 Yes2 DK/Ref
	a. [Show if yes to Q10] Have you had difficulty taking care of children at home?	No.....1 Yes.....2 DK/Ref
	b. [show if yes to Q10] How have you dealt with care for your children during this time?	Describe DK/Ref
Q11	Do you have any children that were receiving meals from school right before the COVID pandemic began?	No.....1 Yes.....2 DK/Ref
	a. Have you received school meals and/or Pandemic EBT during the COVID pandemic?	No.....1 Yes, Both Yes, Meals Yes, Pandemic EBT DK/Ref
	b.[Show if Yes, Pandemic EBT or both] Has receiving pandemic EBT helped your family?	No.....1 Why not? Yes.....2 How so? DK/Ref
	c. [Show if yes to Q11a meals/both] How satisfied are you with the school meal program during the COVID pandemic? Would you say... (<i>read responses</i>):	Very satisfied Somewhat satisfied Somewhat unsatisfied Very unsatisfied DK/Ref
	d. [Show if yes to Q11a meals/both] What would make the school meals work better for you during the COVID pandemic?	Describe DK/Ref
Q12	Do you have any children that were receiving free meals from childcare right before the COVID pandemic began?	No.....1 Yes.....2 DK/Ref
	a. [Show if yes to Q12] Have you continued to receive childcare meals during the COVID pandemic?	No.....1 Yes.....2 Please describe _____ DK /Ref
	b. [show if yes to Q12a] How satisfied are you with the childcare meal program during the COVID pandemic? Would you say... (<i>read responses</i>):	Very satisfied Somewhat satisfied Somewhat unsatisfied Very unsatisfied DK/Ref

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	c. [Show if yes to Q12] What would make the childcare meals work better for you during the COVID pandemic?	Describe DK/Ref
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WIC participation and enrollment

Q13	Who in your household is currently receiving WIC? (<i>Read off options</i>) I am going to list off several categories, please tell me yes or no and if yes how many for each category.	Pregnant woman..... No/ Yes ___#/DK-Ref Postpartum woman No/Yes ___#/DK-Ref newborn to <12 months. No/Yes ___#/DK-Ref Child age1(<2 years)..... No/Yes ___#/DK-Ref Child ages 2 to 5 years..... No/ Yes ___#/DK-Ref
Q14	We are trying to understand people's patterns of participation in WIC before, and since the COVID pandemic started in March. Did you join WIC for the first time during the pandemic? (If yes, PROBE: Just to confirm, you have never participated in WIC before March of 2020.)	No...1 Yes, new...2 DK/Ref
	a. [Show if Q14 no] Did you receive WIC in the past but stopped receiving WIC and then returned to WIC since the start of pandemic in March, 2020?	No...1 Yes, returned...2 DK/Ref
	b. [Show if Q14a no] Have you been receiving WIC benefits without any gaps over the last year? (If yes, PROBE: Just to confirm, you were on WIC before the pandemic started in February of 2020 and have continued to participate since the pandemic started.)	No...1 Yes, continuous...2 (Skip to Q23) DK/Ref
	c. [Show if Q14 or Q14a yes and Q13 includes Pregnant Woman or Newborn] Did you rejoin WIC because of a new pregnancy?	No...1 Yes...2 DK/Ref
Q15	[Show if Q14a, yes, returned] When is the last time your family participated in WIC?	(enter month/year, or just year if that's all she can remember) DK/Ref
Q16	[show if Q14 or Q14a yes] How hard or easy was it to enroll in WIC? Please describe your experience enrolling/re-enrolling in WIC, including how it	Describe DK/Ref

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	compared to enrolling in other programs, if you applied to others. (<i>probe for general experience</i>)	
Q17	[show if Q14 or Q14a yes] How did you find out you were eligible for WIC? (Mark all that apply)	Friend or family member Another program. What program? _____ By calling WIC Online eligibility calculator Other: _____ DK/Ref
Q18	[show if Q14 or Q14a yes] This is the first time the WIC Program has enrolled new/returning participants over the phone instead of face to face. How did you provide proof of income, proof of address, (and proof of pregnancy if needed)? (Mark all that apply)	Text Email Other _____ DK/Ref
Q19	[show if Q14 or Q14a yes] How comfortable were you sharing information this way? (Read responses)	Comfortable Somewhat comfortable Somewhat uncomfortable Uncomfortable DK/Ref
Q20	[show if Q14 or Q14a yes] Did you experience any other challenges enrolling in WIC remotely during the COVID pandemic?	No.....1 Yes.....2 What things could be improved? _____ DK/Ref
Q21	[show if Q14 or Q14a yes] Why did you enroll in WIC?	Describe _____ DK/Ref
Q22	[show if Q14 or Q14a yes] How did you learn how to use the WIC card? (Mark all that apply)	Watched video Taught by phone Neither/haven't done this yet Other DK/Ref
Q23	Were you able to download the California WIC App on your smart phone?	No.....1. Why not? _____ Yes.....2 DK/Ref

WIC services (asked of all – new, returning and existing participants)

Q24	Have you talked with a WIC staff person by phone since the start of the COVID pandemic, when WIC clinics were closed to participants? (not counting when you enrolled in WIC over the phone. <i>for anyone newly enrolled</i>)	No.....1 (e.g. my benefits are loaded on my WIC Card and I know how to use them) Yes2 DK/Ref
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Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

Q25	Have you received information from WIC during the COVID pandemic by...?: (Select all that apply)(Read responses).	Text..... No/ Yes/ DK-Ref Email.....No/ Yes/ DK-Ref Online website..... No/ Yes/ DK-Ref California WIC app..... No/ Yes/ DK-Ref Other: (specify)_____ No/ Yes/ DK-Ref
Q26	[Show If yes to any in Q24-25] What have been the most helpful ways for you to get information from WIC during this pandemic?	Describe _____ DK/Ref
Q27	What suggestions do you have for WIC to improve communication with you during this pandemic?	Describe _____ DK/Ref

The next questions are about shopping for your WIC foods

Q28	During the COVID pandemic, where do you most often shop for WIC-approved foods? Would you say... (read responses):	Large store with lots of check out registers Small store with 1 to 2 registers WIC store Have not been shopping for WIC foods (skip to Q36) DK/Ref
Q29	Have you had any challenges finding or purchasing any of the WIC foods since the COVID pandemic started? (I can list the WIC foods if that would be helpful (may be needed for brand new ppts.)	No.....1 Yes.....2 Please describe (NPI staff will have a list to prevent conversation on foods that aren't WIC items) DK/Ref
	a. [Show if yes to Q29] Don't read off the list below unless asked. Just mark off which items Fruits Vegetables Milk Cheese Yogurt Eggs Breakfast Cereal Whole grain bread, whole wheat or corn tortillas, or brown rice (this is one category of whole grain foods) Peanut Butter Beans/peas/lentils	<ul style="list-style-type: none"> 🍏 (Listed in alphabetical order to mark off) 🍏 Beans/peas/lentils: Describe _____ 🍏 Breakfast cereals: Describe _____ 🍏 Canned/ Jarred meats (ex:fish): Describe _____ 🍏 Canned/Jarred Fruits and Vegetables: Describe _____ 🍏 Cheese: Describe _____ 🍏 Eggs: Describe _____ 🍏 Fruit: Describe _____ 🍏 Juice 100%: Describe _____ 🍏 Milk(cow): Describe _____ 🍏 Milk(Soy): Describe _____ 🍏 Peanut butter: Describe _____ 🍏 Tofu: Describe _____ 🍏 Vegetables: Describe _____ 🍏 Whole grains (bread, pasta, tortillas wheat/corn,

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	<p>100% Juice Tofu/Soy milk</p> <p>Infants < 12m: Infant formula (captured later) Jarred fruits and vegetables Jarred meats</p>	<p>oatmeal, brown rice: Describe _____</p> <p>🍏 Yogurt: Describe _____</p> <p>🍏 DK/Ref</p>
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Q30	Some food stores are trying to make it easier to access WIC food items during the COVID pandemic. Are food stores in your area offering any of the following? (Read options) (Mark all that apply)	<p>A special section in the store for WIC foods... No/ Yes/ DK-Ref</p> <p>Preordering WIC foods by phone or online for pick up at the store or curbside... No/ Yes/ DK-Ref</p> <p>Paying online for WIC foods with delivery to your home... No/ Yes/ DK-Ref</p> <p>Other, Describe _____ No/ Yes/ DK-Ref</p>
Q31	Are you aware that because of the COVID pandemic, WIC has temporarily expanded brands and package sizes that can be purchased if the WIC food is not available at the store?	<p>No.....1 (skip to Q33)</p> <p>Yes...2 How did you find out about this? (go to Q32)</p> <p>DK/Ref (skip to Q33)</p>
Q32	Have you used your WIC Card to purchase any food items from this temporarily expanded WIC food list?	<p>No.....1</p> <p>Yes.....2 Which items? _____</p> <p>DK/Ref</p>
Q33	Has the California WIC App helped you understand which foods you can buy with your WIC card?	<p>No.....3 Haven't used WIC App (skip to Q36)</p> <p>No.....1 Other reason. Please describe _____</p> <p>Yes.....2 Please describe _____</p> <p>DK/Ref</p>
Q34	How satisfied are you with the WIC App? Would you say... (read responses):	<p>Very satisfied</p> <p>Somewhat satisfied</p> <p>Somewhat unsatisfied</p> <p>Very unsatisfied</p> <p>DK/Ref</p>
Q35	How would you improve the WIC App?	<p>Describe</p> <p>DK/Ref</p>
Q36	[Show if Q13 infant <12 months on the program] Have you run into challenges getting WIC-approved infant formula	<p>No.....1 Using formula</p> <p>No.....3 Breastfeeding/not using formula</p> <p>Yes.....2 What have you done to deal with this? (Probes to</p>

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	during the COVID pandemic? (If no, probe if using formula)	include if not shared: Have you had to water down formula, feed infant less, introduce other foods you weren't planning to introduce yet, faced store item-limits and had to come to the store more) DK/Ref
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The next few questions are about general food purchasing, not only your WIC foods

Q37	Many people have been purchasing more food during the COVID pandemic to stock up. Have you stocked up on additional food because of COVID?	No.....1 Yes....2 DK/Ref
	a. [Show if yes to Q37] Would you say you stocked up enough for up to 1 week, 2 weeks, or more than 2 weeks?	Enough for up to 1 week Enough for up to 2 weeks Enough for more than 2 weeks DK/Ref
Q38	Compared to what you usually buy, have you bought more, less or about the same amount of shelf-stable foods (such as rice, dried or canned beans, or other canned or frozen goods) during the COVID pandemic?	Bought about the same Bought more. Why? _____ Bought less. Why? _____ DK/Ref
Q39	Due to COVID, WIC is temporarily providing more money to WIC families for fruits and vegetables. In the past month, was the increased amount...:(read responses)	Not enough. Please describe _____ Just right. Describe how you used this additional money _____ Too much. What made it hard for your to spend more? Describe _____ Didn't buy. DK/Ref
Q40	Compared to what you usually buy have you bought more, less or about the same amount of fresh fruits and vegetables during the COVID pandemic? (If bought more, probe if they think this is different from the amount they ate before)	Bought about the same Bought more. Why? _____ Bought less. Why? _____ DK/Ref
Q41	Compared to what you usually buy, have you changed the beverages you purchase during the COVID pandemic? (If yes, probe if drinking habits have changed or if they are just stocking up more than before but drinking the same amount)	No....1 Yes....2 What were the changes and why? _____ DK/Ref

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

Q42	Households often throw away some of the food that they buy. Compared to the amount of food you usually throw away, have you thrown away more, less, or about the same amount of food during the COVID pandemic?	Throw away about the same which is very little (Mark if volunteered) Thrown away about the same Thrown away more. Why? _____ Thrown away less. Why? _____ DK/Ref
Q43	I'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was <u>often</u> true, <u>sometimes</u> true, or <u>never</u> true for your household in the last month—that is, the last 30 days. [USDA 6-item plus item on worry]	
	a. "We worried whether our food would run out before we got money to buy more." Was that often, sometimes, or never true for your household in the last 30 days?"	Often true Sometimes true Never true DK / Ref
	b. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?	Often true Sometimes true Never true DK/Ref
	c. In the last 30 days, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?	No.....1 Yes....2 DK/Ref
Q44	Since the COVID pandemic have you or anyone in your household gotten free groceries from a food pantry, food bank, church, or other place that helps with free food?	No.....1 (Skip to Q45) Yes....2 DK/Ref
	a. Compared to before the COVID pandemic, would you say that you get more, less, or about the same amount of food from a church, food bank or pantry? Or is this the first time you have gotten food from one of these places?	More free food. Why? _____ Less free food. Why? _____ About the same amount First time receiving DK/Ref
Q45	Earlier this year, before the COVID pandemic, did you or your family participate in any of the following programs (read items)? (For each program the respondent reported, ask a as applicable	CalFresh (also called SNAP/EBT/food stamps): yes/no/DK Ref CalWorks (also called TANF, pronounced tan-if): yes/no/DK Ref Medicaid or Medi-cal: yes/no/DK Ref
	a. [Show if yes to Q45] Are you still	No.....1

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

	participating in this program?	Yes.....2 DK/Ref
Q46	Since the start of the COVID pandemic, have you tried to apply for any additional assistance program besides WIC, like CalFresh (also known as EBT or food stamps) or Pandemic-EBT?	No.....1 (Skip to Q47) Yes.....2 DK/Ref
	a. Which programs? [READ OUT EACH ONE] (For each program the respondent reported becoming newly eligible for, ask b-c as applicable)	CalFresh..... Yes/No/DK-Ref Pandemic-EBT..... Yes/No/DK-Ref Senior Farmers Market Nutrition ProgramYes/No/DK-Ref CalWorks.....Yes/No/DK-Ref Medicaid or Medi-cal.....Yes/No/DK-Ref Free or reduced price school meals.....Yes/No/DK-Ref Other _____
	b. How did you learn about this program?	Describe DK/Ref
	c. Are you now participating in this program?	No.....1 Yes.....2 DK/Ref

Now I have a question about COVID and immigration

Q47	Before COVID, did you ever not enroll in WIC or stop getting WIC because of immigration concerns?	No.....1 Yes.....2 Please describe _____ DK/Ref
-----	---	--

I have a few multiple-choice questions about how you are feeling, as COVID has been hard for most families.
(source Patient Health Questionnaire-2 (PHQ-2))

Q48	Over the past two weeks, how often have you been bothered by any of the following problems?	
	a... having <u>little</u> interest or pleasure in doing things (Read responses)	Not at all Several days More than half the days Nearly every day DK/Ref
	b... feeling down, depressed or hopeless (Read responses)	Not at all Several days More than half the days Nearly every day DK/Ref

Would you like a number for someone at the LA County Department of Mental Health you can speak with: (800) 854-7771 OR TEXT "LA" TO 741741

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

Thank you for sharing this information with us. I just want to ask you some final questions about you and your family. You are allowed to skip any of the questions.

Q49	What is the highest level of education you have completed or the highest degree you have received? (IF HIGH SCHOOL, ASK: Did you graduate or get a GED?)	No formal schooling.....1 8th grade or less.....2 Grades 9-12 but not a high school grad.....3 High school graduate/GED.....4 Some college/trade school/ associate degree.....5 (4-year) college graduate.....6 Post graduate/ professional degree7 Don't know..... 98 Refused.....99
Q50	For classification purposes, we'd like to know what your racial background is. Are you White, Black or African American, Hispanic or Latino, Asian, Pacific Islander, American Indian or an Alaskan native, or a member of another race or a combination of these? (Mark all that apply)	White.....1 Black/African American2 Asian3 Pacific Islander.....4 American Indian/Alaskan Native5 Hispanic/Latino.....6 Other (specify)7 Don't know..... 98 Refused.....99
Q51	How many people living in your household are between the ages of: (Read off options) (if pregnant count once child is born)	0-4 years _____ 5-17 years _____ 18-65 years _____ 65 and older _____ DK/Ref
Q52	What is your ZIP code? _____	Describe _____ DK/Ref

Closing

Q53	At the end of our study, we will share overall findings with the WIC program. Do you have any suggestions for how we might share the findings with WIC participants?	Describe DK/Ref
Q54	Is there anything else you would like to add or any questions you have?	Describe DK/Ref

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

Separate Document

Q55	[IF QUESTIONS ASKED DURING SURVEY]: It sounded like you had questions about [LIST ITEMS]. Would you like WIC to contact you and answer your questions? [IF YES, MARK THE ITEMS THEY HAVE QUESTIONS ABOUT]	WIC Card WIC App Protection for renters or employment Expanded WIC food list Other _____ Participant did not have questions
Q55a	Phone number	_____

Thanks so much for sharing your thoughts today. You will be receiving \$25 for your time. I can either mail you a gift card or email or text you an electronic gift card. Which would you prefer?

IF mail selected: *I am stopping the recording now and noting your address in a separate document so your none of your personal information will be connected to your survey responses. Could you tell me the name and address to send this gift card to?*

First name, Last name _____
Street Address _____
City _____

IF email selected: *I am stopping the recording now and noting your email address in a separate document so your none of your personal information will be connected to your survey responses. Can you please tell me the email address to send this gift card to?*

Email Address _____

IF text selected: *I am stopping the recording now and noting your phone number in a separate document so your none of your personal information will be connected to your survey responses. Can you please tell me the mobile phone to send this gift card to?*

Mobile Phone _____

Thanks again for your participation in our survey!

Notes (if needed)

Figure 1. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participant interview guide. COVID = coronavirus disease 2019.

Q0	Do you agree to participate in this interview today?	No (Record if reason given why not; End call) Yes (Continue) Did not pick up (add how many times you have tried to contact)
----	--	---

Thank you for agreeing to participate. Please note that all the questions throughout the interview refer to the time that COVID-related waivers and other adjustments to WIC operations have been in place. (Remind the interviewee as needed that questions refer to the time during COVID-19.)

Question	Responses
Topic A: The first few questions are related to remote working conditions.	
1. First, are any of your clinics seeing WIC participants in person ?	<ul style="list-style-type: none"> • No • Yes. Please describe which types of participants are being seen in person, under what conditions and how you have worked out how to do this safely (e.g., PPE for staff, masks for clients). • DK/Ref
2. Some agencies have shifted to all staff teleworking, some have all staff working in sites, and some have a hybrid of some staff teleworking and some staff working in sites. At your agency, where are staff located ?	<ul style="list-style-type: none"> • In the WIC site • Teleworking • Other (describe):
3. What equipment or services , if any, were purchased for staff to continue working during the pandemic (in addition to the equipment or services you normally use)? I will list several options, please tell me if you have purchased any of these.	<ul style="list-style-type: none"> • Cell phones or soft phones • Computer/laptop/tablet • Web camera • Headset • Wi-Fi hotspot • Enhanced internet service • Plexiglas • PPE (masks, wipes, hand sanitizer) • Software licenses for home use • Modular units for additional units in the office • Other (describe): • None (Skip to Q5)

Figure 2. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

<p>4. Of these things that you have had to purchase to work during the pandemic, was this a one-time cost or do you anticipate ongoing costs in order to maintain this equipment or service? (If yes, do you have the funds to continue this indefinitely?)</p>	<ul style="list-style-type: none"> • Cell phone or soft phones. One-time costs Ongoing costs Don't know (<i>If Ongoing, do you have the funds to support these additional costs</i> Yes No Don't know) • Wi-Fi hotspot. One-time costs Ongoing costs Don't know (<i>If Ongoing, do you have the funds to support these additional costs</i> Yes No Don't know) • Enhanced internet service. One-time costs Ongoing costs Don't know (<i>If Ongoing, do you have the funds to support these additional costs</i> Yes No Don't know) • Other (describe): _____ One-time costs Ongoing costs Don't know (<i>If Ongoing, do you have the funds to support these additional costs</i> Yes No Don't know)
<p>5. Was there equipment that you needed but could not afford to purchase?</p>	<ul style="list-style-type: none"> • No • Yes. Describe:
<p>6. a) Have you had to furlough any staff or shift full-time staff to part-time during COVID? b) Have staff voluntarily reduced their hours?</p>	<ul style="list-style-type: none"> • No • Yes. Describe: <ul style="list-style-type: none"> • No • Yes. Describe:
<p>7. Have you been short-staffed during COVID?</p>	<ul style="list-style-type: none"> • No • Yes. (PROBE: Has being short staffed made it difficult to serve all of your participants?---trying to get at scope of problem) Describe:
<p>8. What concerns do you have about reopening to in-person visits with WIC participants in the future?</p>	<ul style="list-style-type: none"> • None • Describe:
<p>9. In addition to the reopening guidance, is there any additional support from the state that would be helpful as you return to work as usual?</p>	<ul style="list-style-type: none"> • None • Describe:
<p>Topic B: As we move through the interview, sections will be organized by waiver. This first section refers to the physical presence waiver, which waived the requirement that WIC participants enroll or re-certify in person.</p>	
<p>10. What methods has your agency used to conduct certification (that is, enrollment and recertification) appointments? [Note: CA WIC does not have an approved videoconference platform; several agencies may be using a platform approved for mini-grants]</p>	<ul style="list-style-type: none"> • Telephone • Videoconference such as Zoom, Teams, FaceTime etc. (specify platform) • Online application to collect demographic and eligibility information (specify platform) • Electronic method(s) for participants to send eligibility or certification documents (Specify: document upload, email, text, fax) • Curbside • Modifications to appointments conducted in-person at the clinic to allow for social distancing • Other (describe):
<p>11. For certifications, which of these methods are you using the most? The second most and why?</p>	<ul style="list-style-type: none"> • Most common (describe) • Second most common (describe)

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

12. We're interested in learning about which methods your agency used for participants to send eligibility documents or sign documents for certification. I will list several methods of communication, please tell me if your agency has used any of these.	<ul style="list-style-type: none"> • Mail • Email • Fax • Text message • Online application • WIC app • Services/tools that allow documents to be uploaded or signed electronically, such as Docusign (Specify services/tools) • Drop off at clinic • WIC WISE (<i>Note: this would be if clinic is seeing staff in person</i>) • Other (describe):
13. Are there differences in certification methods used for new applicants versus for participants being recertified?	<ul style="list-style-type: none"> • No • Yes. Please describe any differences for new applicants vs re-certifications:
14. How has your agency continued to receive bloodwork and height and weight information from participants?	<ul style="list-style-type: none"> • Please describe how you are getting this information and if that has changed since the pandemic began.
15. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to implement remote certification?	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
16. What, if anything, has been hard about implementing the remote certification?	<ul style="list-style-type: none"> • Nothing hard • Describe:
17. Given your experiences during COVID, if your agency had to rely solely on remote certification in the future, what would you do differently?	<ul style="list-style-type: none"> • Nothing differently • Describe:
18. If your agency could continue to certify remotely after the waiver ends, would you want to?	<p>Why or why not? If yes, describe which methods you would want to continue:</p>
Topic C: The next set of questions are about the extended certification waiver, which allows WIC clinics to extend certifications to 90 days for children. Please answer for the period when the state was using this waiver.	
19. Did your agency utilize the extended certification period for children (1-5 years old) to 90 days?	<ul style="list-style-type: none"> • No (If no, skip to next topic) • Yes. Describe:
20. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to extend the certification period for children?	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
21. What, if anything, has been hard about extending the certification period for children?	<ul style="list-style-type: none"> • Nothing hard • Describe:
22. Given your experiences during COVID, if your agency had to extend the certification period for children in the future, what would you do differently?	<ul style="list-style-type: none"> • Nothing different • Describe:

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

23. If your agency could continue to extend the certification period for children after the waiver ends, would you want to?	Why or why not?
Topic D: Now let's talk about the separation of duties waiver, which allows a single WIC staff person to determine eligibility for certification and issue food benefits	
24. During COVID, did your agency waive separation of duties ?	<ul style="list-style-type: none"> No (If no, skip to next topic) Yes. Describe:
25. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your agency to waive separation of duties?	<ul style="list-style-type: none"> 1 - Very easy 2 3 4 5 - Very difficult
26. What, if anything, has been hard about waiving separation of duties?	Describe:
27. Given your experiences during COVID, if your agency had to waive separation of duties in the future, what would you do differently?	Describe:
28. If your agency could continue to waive separation of duties after the waiver ends, would you want to?	Why or why not?
Topic E: The next questions are about remote issuance, which allows participants to get their WIC benefits without an in-person visit. Note that we will be asking questions about auto-issuance after this. These questions are specifically about the remote issuance process that enables states to load WIC benefits remotely	
29. We're interested in learning about which methods your agency used to inform participants about the remote issuance I will list several methods of communication, please tell me if your agency has used any of these.	<ul style="list-style-type: none"> Mail Email Phone call Text message Video conferencing Website WIC app Social media or new media (specify format) Other (describe):
30. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to remotely issue food benefits?	<ul style="list-style-type: none"> 1 - Very easy 2 3 4 5 - Very difficult
31. What, if anything, has been hard about remotely issuing food benefits?	<ul style="list-style-type: none"> Nothing hard Describe:
32. Given your experiences during COVID, if your agency had to begin remote issuance in the future, what would you do differently?	<ul style="list-style-type: none"> Nothing different Describe:
33. If your agency could continue to remotely issue benefits, would you want to?	Why or why not?
Topic F: Now let's talk about auto-issuance of WIC benefits.	

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

<p>34. When the COVID-19 pandemic started, CDPH WIC began a monthly process of auto-issuing benefits for those agencies that opted in to allow auto-issuance. Did your agency opt-in to auto-issuance? [Note: agencies were able to opt in for the May auto-issuance; March and April all agencies were auto-issued] <i>If yes, display logic will take you to 34a + 34b</i> 34a. How has auto issuance helped you? _____ 34b. What challenges have you experienced with auto issuance “No challenges” or _____</p>	<ul style="list-style-type: none"> • No Why did your agency decide not to opt-in? • Yes <ul style="list-style-type: none"> ○ How has auto-issuance helped you? (Please be as specific as possible.) <ul style="list-style-type: none"> ▪ Describe: ○ What challenges have you experienced with auto-issuance? <ul style="list-style-type: none"> ▪ No challenges ▪ Describe:
<p>35. Has your agency used any of the following methods to inform participants about their auto-issued benefits?</p>	<ul style="list-style-type: none"> • Mail • Email • Phone call • Text message • Website • WIC app • Other (describe): • None
<p>36. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to auto-issue food benefits?</p>	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
<p>37. What, if anything, has been hard about auto-issuing food benefits?</p>	<ul style="list-style-type: none"> • Nothing hard • Describe:
<p>38. Given your experiences during COVID, if your agency had to begin auto-issuing in the future, what would you do differently?</p>	<ul style="list-style-type: none"> • Nothing different • Describe:
<p>39. Do you think that auto-issuance should continue to be available for local agencies to opt in to?</p>	<p>Why or why not?</p>
<p>Topic G: This section is about the food package substitution waiver, which allows for changes to the WIC package if the usually approved items are not available.</p>	

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

<p>40. We're interested in learning about the methods your agency used to inform participants about expanded WIC food options (e.g., package sizes, brands)? I will list several options, please tell me if you have used any of these.</p> <p><i>After all the methods have been checked, a display pattern will take you back to each method selected to capture</i></p> <p>40_ "method"_text and 40_ "method"_freq: Text: When did you first use "method" to communicate with participants about this? Freq: Would you say the frequency of communication by "method" is...?</p>	<ul style="list-style-type: none"> • Mail • Email • Phone call (<i>Note: these are calls made by agency</i>) • Text message • Videoconferencing • Website • Online training • WIC app • Other (describe): • None <ul style="list-style-type: none"> ○ When did you first use "method"? <ul style="list-style-type: none"> ▪ Describe: ○ Frequency <ul style="list-style-type: none"> ▪ One time ever ▪ About once a month ▪ Multiple times a month ▪ Multiple times a week ▪ Other (describe)
<p>41. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to communicate with participants about expanded WIC food options?</p>	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
<p>42. What, if anything, has been hard about communicating to participants about the expanded food options?</p>	<ul style="list-style-type: none"> • Nothing hard • Describe:
<p>43. Given your experiences during COVID, if your agency had to communicate to participants about changes to food packages in the future, what would you do differently?</p>	<ul style="list-style-type: none"> • Nothing different • Describe:
<p>44. If the expanded food options could continue after the waiver ends, would you want them to?</p>	<p>Why or why not?</p>
<p>Topic H: Next let's talk about WIC services and nutrition education delivered remotely</p>	
<p>45. Has your agency used any of the following methods to remotely teach participants how to use the WIC card and WIC app?</p>	<ul style="list-style-type: none"> • Mail • Email • Phone call • Text message • Video conferencing • Website • Online training • WIC app • Other (describe):
<p>46. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to remotely deliver information about the WIC card and WIC app to participants?</p>	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

<p>47. a) What, if anything, has been hard about remotely teaching participants how to use the WIC card?</p> <p>b) Given your experiences during COVID, if your agency had to continue to remotely teach participants how to use the WIC card what would you do differently?</p> <p>c) How are you distributing or replacing WIC cards?</p> <p>d) Are you having difficulty getting WIC cards to participants?</p> <p>e) Are WIC participants having difficulties with their WIC cards?</p>	<ul style="list-style-type: none"> • Nothing hard • Describe: • Nothing different • Describe: • Describe: • No • Yes, Describe: • No • Yes, Describe:
<p>48. a) What, if anything, has been hard about remotely teaching participants how to use the WIC app?</p> <p>b) Given your experiences during COVID, if your agency had to continue to remotely teach participants how to use the WIC app in the future, what would you do differently?</p>	<ul style="list-style-type: none"> • Nothing hard • Describe: • Nothing different • Describe:
<p>49. If your agency could continue remotely teaching participants how to use the WIC card and WIC app after COVID has resolved, would you want to?</p>	<ul style="list-style-type: none"> • No, why not? • Yes, why? (Which methods would you want to continue?
<p>50. During remote delivery of nutrition education, did you offer education to individuals only, or to both individuals and groups?</p>	<ul style="list-style-type: none"> • Individuals only • Both groups and individuals (Specify approximate percentage delivered to groups vs to individuals:)
<p>51. Has your agency used any of the following methods to remotely deliver nutrition education to individuals?</p>	<ul style="list-style-type: none"> • Mail • Email • Phone call • Text message • Videoconference • Online training • WIC app • Other (describe):
<p>52. a) Has your agency used any of the following methods to remotely deliver nutrition education to groups?</p> <p>b) How has your agency handled logistics for setting up group nutrition education?</p>	<ul style="list-style-type: none"> • Phone call • Text message • Video conference • Other (describe): • Describe:

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

53. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to remotely deliver nutrition education to participants?	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
54. What, if anything, has been hard about remotely delivering nutrition education?	<ul style="list-style-type: none"> • Nothing hard • Describe:
55. Given your experiences during COVID, if your agency had to continue to primarily deliver nutrition education remotely in the future, what would you do differently?	<ul style="list-style-type: none"> • Nothing different • Describe:
56. If your agency could continue delivering nutrition education remotely indefinitely, would you want to?	Why or why not? Which methods would you want to continue?
Topic: The last thing we would like to ask you about is breastfeeding support.	
57. First, has your agency been able to provide breastfeeding support during COVID?	<ul style="list-style-type: none"> • Yes • No. If no, skip to Q53
58. Has all your breastfeeding support been provided through remote methods?	<ul style="list-style-type: none"> • Yes • No. If no, describe methods.
59. Has your agency used any of the following methods to remotely provide breastfeeding support?	<ul style="list-style-type: none"> • Mail • Email • Phone call • Text message • Video conferencing • Online training • WIC app • Other (describe):
60. On a scale of 1 (very easy) to 5 (very difficult), how easy or hard was it for your agency to modify or develop policies, protocols, and related information for your staff to remotely deliver breastfeeding support to participants?	<ul style="list-style-type: none"> • 1 - Very easy • 2 • 3 • 4 • 5 - Very difficult
61. What, if anything, has been hard about remotely delivering breastfeeding support?	<ul style="list-style-type: none"> • Nothing hard • Describe:
62. Given your experiences during COVID, if your agency had to continue to primarily deliver breastfeeding support remotely in the future, what would you do differently?	<ul style="list-style-type: none"> • Nothing different • Describe:
63. FINAL QUESTION: Is there anything else you would like to share with me about your agency during COVID?	
Topic: Background Information	
64. Record position or title at agency (from contact info provided)	

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.

65. How long have you been in your current role at your agency?	<ul style="list-style-type: none"> • <1 year • 1-<5 years • 5-<10 years • 10-<20 years • 20-<30 years • 30+ years
66. How long have you worked at WIC in total? (only fill in months if given)	<ul style="list-style-type: none"> • <1 year • 1-<5 years • 5-<10 years • 10-<20 years • 20-<30 years • 30+ years

Notes: For most questions with multiple answer options, mark all that apply.

In Qualtrics, there is a "Don't Know/Refused" option for every question, in case a participant chooses to skip a question

Figure 2. (continued). Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) agency interview guide. COVID-19 = coronavirus disease 2019.